DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018556 Address: 333 Burma Road **Date Inspected:** 07-Dec-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Xu Xian Ping No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

On this date Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector, D.Sukanthan was present during the time noted above for observations relative to the work being performed.

OBG # BAY 8

This QA inspector received ZPMC Non Destructive Testing (NDT) notification 07673 to perform Magnetic particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated a Magnetic particle Test report for this date. The member is identified as Bike Path. The weld tested is identified as follows:

(BK004A2-056-014,015,017,019,020)

This QA Inspector randomly observed the following work in progress:

OBG # CROSSBEAM CB15

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSSBEAM CB16

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This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSSBEAM CB17

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSSBEAM CB18

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSSBEAM CB19

This QA observed ZPMC qualified welding personnel identified as 054467 perform Shielded Metal Arc Welding (SMAW) Process on weld joint CB3003K-001-047,048. ZPMC Quality Control Personnel (QC) identified as Mr. Xu hai yang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2114-FCM.

This QA observed ZPMC qualified welding personnel identified as 049769 perform Shielded Metal Arc Welding (SMAW) Process on weld joint CB3003J-001-105,106. ZPMC Quality Control Personnel (QC) identified as Mr. Xu hai yang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2114-FCM.

During the Quality Assurance (QA) random in-process visual inspection of Orthotropic Box Girder (OBG) Crossbeam CB19, this QA inspector discovered the following issue. Base metal repairs being performed without prior approval of the Engineer. Repairs were being performed in runoff tab removal areas on the Floor beam diaphragm web plate. Floor beam diaphragm is identified as FB3246. Web plate is identified as X4254B (SPCM). The material is A709 Grade 345 Seismic Performance Critical Member (SPCM). This QA notified ZPMC QC identified as Mr. Xu hai yang of this issue and that an incident report would be generated. For further information, please see the attached pictures below.

OBG # SEGMENT 12CW

This QA Inspector performed a preliminary random visual inspection on OBG Segment 12CW at panel point 115 to panel point 117, after the grit blast of the internal components of the Side Panel and edge panel of this segment. Areas of visual weld defects that will require welding were taped and will be repaired after the coating is applied. ZPMC QC personnel are aware of these areas and were present during the inspection.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

As mention above

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-00422372, who represents the Office of Structural Materials for your project.

Inspected By:	Sukanthan, Dhanasingh	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer